Index of Authors

ABBOTT, E. M., PARKINS, J. J. and HOLMES, P. H. The effect of diet on the pathophysiology of ovine haemonchosis, xlvi

ABO-SHEHADA, M. N. The effect of some anthelmintics on the second-stage larvae of *Toxocara canis*, xiii

ABO-SHEHADA, M. N. The ultrastructure of the second stage larvae of *Toxocara canis*, lix

AL-ADAY, N. K. M. Passive transfer of protection against *Plasmodium vinckei vinckei* from mothers to offspring in mice, lxvii

AL-ADAY, N. K. Splenomegaly during *Plasmodium vinckei vinckei* infection in mice, xliii

AL-DABBAGH, N. Y. and BRUCE, R. G. Transfer of immunity to *Trichinella spiralis* in infant mice, lxvii

ANDERSON, R. M. and GORDON, D. M. Processes influencing the distribution of parasite numbers within host populations with special emphasis on parasite-induced host mortalities, 373

ANDERSON, R. M. and MAY, R. M. Coevolution of hosts and parasites

ANDERSON, R. M., MERCER, J. G., WILSON, R. A. and CARTER, N. P. Transmission of *Schistosoma mansoni* from man to snail: experimental studies of miracidial survival and infectivity in relation to larval age, water temperature, host size and host age, 339

ANDERSON, R. M. *See* CARTER, N. P., 411.

ASH, C. P. J. and ATKINSON, H. J. The possible role of trehalose in the survival of the eggs of *Nematodirus battus* during dormancy, lv

ATKINS, A. M. and WATTS, S. D. M. Differentiation of choline and carnitine acetyltransferases in *Nippostrongylus brasiliensis*, lxiv

AWAN, F. A. and HOMINICK, W. M. Observations on tanning of the potato cyst-nematode, *Globodera rostochiensis*

AWOGUN, I. A. New measuring device for bilharzia intermediate hosts, lxxviii

AWOGUN, I. A. The prevalence of enterobiasis among school children in a Nigerian rural community and the therapeutic effect of thiabendazole, lxxviii

BAILEY, M., LLOYD, S. and SOULSBY, E. J. L. Non-specific immunostimulatory effect of antigens of *Strongylus vulgaris*, xxxiv

BALL, S. J. *See* LEWIS, D. C.

BARBET, A. F. and MCGUIRE, T. C. Purification of *Trypanosoma brucei* variable surface glycoproteins: analysis of degradation occurring during isolation, 511

BARKER, D. C., BUTCHER, J. and KENNEDY, W. P. K. Identification of isolates of leishmanias using specific kDNA probes, xxxii

BARKER, ROSALIND J. *See* SMITH, JUDITH E.

BARRETT, J. Metabolism of anabiotic nematodes, xxiii

BARRETT, N. J., ONG, S. J. and SMYTH, J. D. *In vitro* culture of *Mesocestoides corti* (Cestoda) from Tetrathyridium to adult, lxi

BASCH, P. F. and BASCH, NATALICIA. *Schistosoma mansoni*: scanning electron microscopy of schistosomula, adults and eggs grown *in vitro*, 333

BASCH, NATALICIA. *See* BASCH, P. F.

BASCHONG, W. and RUDIN, W. Comparison of surface iodination methods by electron microscopic autoradiography applied *in vitro* to different life-stages of *Dipetalonema viteae* (Filarioidea), 559

BEHNKE, J. M. and HANNAH, J. Stimulation of immunity to *Nematospiroides dubius* in mice, a re-evaluation of the parameters involved, xviii

BENNETT, C. E. and JOSHUA, G. W. Investigation of functions of specific antisera to juvenile antigens of *Fasciola hepatica*, li

BENNETT, J. L. *See* BRICKER, CONNIE, S.

BENNETT, J. L. *See* THOMPSON, D. P.

BETTERTON, C. and FRYER, S. E. *Schistosoma haematobium* in Northern Nigeria – a complex of snail hosts and parasite strains, xxii

BIANCO, A. E. *See* TOWNSON, S.

BOASE, C. J. Experimental hut trials in Sri Lanka to evaluate effectiveness of bendiocarb against the malaria vector *Anopheles culicifacies*, lxxix

BOWER, SUSAN, M. and WOO, P. T. K. Immunological comparison of four *Trypanosoma* spp. (sub-genus *Schizotrypanum*) from bats, 111

BRASSARD, P., RAU, M. E. and CURTIS, M. A. Infection dynamics of *Diplostomum spathaceum* cercariae and parasite-induced mortality of fish hosts, 489

BRASSARD, P., RAU, M. E. and CURTIS, M. A. Parasite-induced susceptiblity to predation in diplostomiasis, 495

BRETT, SARA J. and COX, F. E. G. Immunological aspects of *Giardia muris* and *Spironucleus muris* infections in inbred and outbred strains of laboratory mice: a comparative study, 85

BRETT, SARA J. and COX, F. E. G. Interactions between the intestinal flagellates *Giardia muris* and *Spironucleus muris* and the blood parasites *Babesia microti*, *Plasmodium yoelli* and *Plasmodium berghei* in mice, 101

BRICKER, CONNIE, S., PAX, R. A. and BENNETT, J. L. Microelectrode studies of the tegument and sub-tegumental compartments of male *Schistosoma mansoni*: anatomical location of sources of electrical potentials, 149

BROSSARD, M. and FIVAZ, V. *Ixodes ricinus* L.: mast cells, basophils and eosinophils in the sequence of cellular events in the skin of infested or re-infested rabbits, 583

BROWN, ANDREW F. Preliminary observations using scanning electron microscopy on the proboscis morphology of *Pomphorhynchus* sp. (Acanthocephala) from the Hampshire Avon, lxxvi

BURT, M. D. B. and MACKINNON, BARBARA M. Polymorphism of microtriches in the cysticercoid of *Ophryocotyle insignis* (Cestoda: Davaineidae), xxxi

BUTCHER, J., KENNEDY, W. P. K. and BARKER, D. J. Use of DNA probes in the identification of isolates of leishmanias and trypanosomes, lxv

CARDOSA DE ALMEIDA, M. L. and TURNER, M. J. Cross-reaction between variant surface glycoproteins (VSGs) of *Trypanosoma brucei*, liv

CARTER, N. P., ANDERSON, R. M. and WILSON, R. A. Transmisson of *Schistosoma mansoni* from man to snail: laboratory studies on the influence of snail and miracidial densities on transmission success, 361

CARTER, N. P. *See* ANDERSON, R. M.

CATCHPOLE, JANET. Field observations of coccidiosis in lambs, x

CHAPMAN, H. D. The use of enzyme electrophoresis for the identification of the species of *Eimeria* present in field isolates of coccidia, 437

CHAPPELL, L. H. and WALKER, E. *Schistosoma mansoni*: amino acid uptake and metabolism, lvi

CHEEMA, K. J. and SCOFIELD, A. M. Haematological response of rats to different levels of infection with *Nippostrongylus brasiliensis*, lvi

CHERNIN, J. and MCLAREN, DIANE J. Immunopathology of laboratory rats infected with larval tapeworms, xxx

CHUBB, JAMES C. Which species of *Schistocephalus*?

CLARKE, A. J. and PERRY, R. N. Egg-shell calcium and the hatching of *Globodera rostochiensis*, lix

COADWELL, W. J. and WARD, P. F. V. The use of faecal egg counts for estimating worm burdens in sheep infected with *Haemonchus contortus*, 251

CORDINGLEY, J. S. and HASAN, GAITI. The ribosomal genes of trypanosomes produce nine different RNA molecules, xxxii

CORDINGLEY, J. S., MCCONNELL, J., TAYLOR, D. W. and BUTTERWORTH, A. E. *In vitro* translation of messenger RNA from *Schistosoma mansoni*, xxix

COURT, J. P. and JENKINS, D. C. *Trichinella spiralis in vitro*: a possible pre-screen for antifilarial agents, lxxiv

COVER, B., GUTTERIDGE, W. E., MACKIE, M. E. R. and SKILBECK, N. Q. A mouse model for chronic Chagas' disease in man, xlii

COX, D. A. and STOREY, D. M. Stimulation of immunity to *Litomosoides carinii* in cotton rats by vaccination with parasite homogenates, i

COX, F. E. G. *See* BRETT, SARA J.

COX, J. and JOYCE, P. A comparison of the effectiveness of free and liposomally entrapped Rafoxanide (3,5-diiodo-3′-chloro-4′-(*p*-chlorophenoxy) salicylanilide, Merck, Sharpe & Dohme) against *Fasicola hepatica* in mice, lxxv

CRAIG, F. C. M. Mechanisms and specificity of monosaccharide transport in *Taenia crassiceps* larvae, lxiii

CROMBIE, JENNY A. and ANDERSON, R. M. Age-prevalence curves of *Schistosoma mansoni* in *Biomphalaria glabrata*: an experimental study, xl

CROMPTON, D. W. T., CARRERA, E. and NESHEIM, M. C. *Ascaris* and lactose tolerance in pre-school children, lv

CROMPTON, D. W. T., KEYMER, ANNE and SINGHVI, A. Rat dietary sugar and *Moniliformis*, lxiv

CROWE, J. S., LAMONT, A. G., BARRY, J. D. and VICKERMAN, K. Activity of monoclonal antibodies against metacyclic variable antigen types of *Trypanosoma brucei*, vii

CRUICKSHANK, J. K., PRICE, K. M., MACKENZIE, C. D. and SPRY, C. J. F. Eosinophil and antibody responses in an inbred rat model of lymphatic filariasis (*Brugia pahangi*): their modulation by Cyclosporin A, xvi

CURTIS, M. A. *See* BRASSARD, P.

DALTON, J. P. and JOYCE, P. Preliminary studies of the surface components of the liver fluke *Fasciola hepatica*, xxix

DANIELS, D. L. Studies on *Discocotyle sagittata* (Leuckart, 1842) and *Dermocystidium vejdovskyi* Jirovec, 1939 on the gills of the Gwyniad *Coregonus lavaretus* (L., 1758) of Llyn Tegid, lxxvi

DAVIES, C. and BILLING, K. Immunoperoxidase techniques for antigen localization in *Schistosoma mansoni* and *Fasciola hepatica*, lxviii

DIESFELD, H. J. *See* RUPPEL, A.

DIXON, J. B. Interactions between lymphocytes and *Echinococcus granulosus*, xxix

DOBSON, C. *See* KWONG, YONG WENG

DOBSON, C. *See* SITEPU, P.

DOCKRELL, H. M., KAPILA, A., GOULD, R. P. and PLAYFAIR, J. H. L. Liver macrophages, protective immunity and immunopathology in *Plasmodium yoelii* malaria, xliv

DOCKRELL, H. M., TAVERNE, J. and PLAYFAIR, J. H. L. Macrophage activation: role of secreted factors in destruction of malarial parasites, lxxv

DONALD, A. D. *See* SMEAL, M. G.

ESPIN, P. *Transversotrema patialense*: the role of cross-insemination in successful reproduction, v

EVANS, N. A. Effect of copper and zinc upon the survival and infectivity of *Echinoparyphium recurvatum* cercariae, 295

FAIRWEATHER, I. *See* HOLMES, S. D.

FENWICK, P., HUBER, CYNTHIA, MCDONALD, P. J., AGGETT, P. J. and WAKELIN, D. The effect of zinc deficiency on the host response to *Trichinella spiralis* infection of rats, ii

FIVAZ, V. *See* BROSSARD, M.

FRICKER, S. P., AMADIFE, A. E., ANGUS, J. M. and KLEIN, R. A. An investigation into the effect of synthetic derivatives of threonine on threonine metabolism and utilization in *Trypanosoma brucei*, xxi

GIBBONS, L. M. Surface structures of importance in the taxonomy of animal parasitic nematodes, lx

GIBSON, D. I. and COLIN, JUDITH A. The *Terranova* enigma, xxxvi

GILBERT, R. and KLEIN, R. A. The role of threonine and carnitine in the energy metabolism of *Trypanosoma brucei brucei*, xx

GILBERT, R. J. and NEWTON, B. A. Ethidium bromide: pharmacokinetics and efficacy against trypanosome infections in rabbits and calves, 127

GORDON, D. M. *See* ANDERSON, R. M.

GREGORY, M. W. Some factors in the pathogenesis of intestinal coccidiosis in mammals, iii

GRENCIS, R. K. Cell trapping in the mesenteric lymph of mice infected with *Trichinella spiralis*, lxix

GRENCIS, R. K. and WAKELIN, D. Analysis of the cells responsible for mediating immunity to *Trichinella spiralis* in mice, xvii

GUNN, A. The ultrastructural localization of acetylcholinesterase and phosphates in the metacestode of *Taenia multiceps*, xxv

GUNN, A. The ultrastructure of the nervous system of *Moniezia expansa*, lx

HALL, ANDREW. Intestinal helminths of man: the interpretation of egg counts, 605
HALL, R., MCBRIDE, J. and HOPE, I. Molecular studies on antigen gene products of erythrocytic stages of *Plasmodium falciparum*, xxxviii
HALTON, D. W. An unusual structural organization to the gut of a digenetic trematode, *Fellodistomum fellis*, 53
HALTON, D. W. and JOHNSTON, B. R. Functional morphology of the metacercarial cyst of *Bucephaloides gracilescens* (Trematoda: Bucephalidae), 45
HAMMOND, D. J. and GUTTERIDGE, W. E. UMP biosynthesis in trypanosomes and leishmania, xx
HANNA, R. E. B. and TRUDGETT, A. G. Development of monoclonal antibodies against surface antigens of juvenile *Fasciola hepatica*, li
HANNAH, J., PRITCHARD, D. I. and BEHNKE, J. M. Evidence that adult *Nematospiroides dubius* impair the immune response of mice to a challenge infection, xviii
HANSEN, B. D., PEREZ-ARBELO, J., WALKONY, J. F. and HENDRICKS, L. D. The specificity of purine base and nucleoside uptake in promastigotes of *Leishmania braziliensis panamensis*, 271
HARRIS, EILEEN A. The helminth parasites of the Cetacea (or 'Parasitology with a Porpoise', lxxi
HARRIS, P. D. Seasonal changes in ectoparasite abundance in natural stickleback populations, xvi
HARRIS, P. D. Variations in the mechanism of attachment in the Gyrodactyloidea (Monogenea), lviii
HARRISON, F. M. Some aspects of the biology of *Cichlidogyrus sclerosus* and a brief taxonomic description of some monogenetic trematodes from Malaysian cultured fishes, xxvi
HARTE, P. G. and PLAYFAIR, J. H. L. Failure of malaria vaccination in mice born to immune mothers, l
HARVEY, K. J., MCLEAN, S. A. and PHILLIPS, R. S. The effect of immune serum and immune cells on the re-invasion of *Plasmodium chabaudi, in vitro*, xlv
HELLE, EERO. *See* VALTONEN, E. TELLERVO
HENDRICKS, L. D. *See* HANSEN, B. D.
HO, B.-C., YAP, E.-H. and SINGH, M. Melanization and encapsulation in *Aedes aegypti* and *Aedes togoi* in response to parasitization by a filarioid nematode (*Breinlia booliati*), 567
HO, JU-SHEY. Copepod parasites of *Psychrolutes* (Pisces: Scorpaeniformes) from deep water in the eastern Pacific, 451
HOLLAND, C. Ecological relationships between three intestinal helminths of the rat, xli
HOLMAN, R. B. and ARME, C. *Ligula intestinalis*: serotonin concentration in parasite and blood of the fish host, lxii
HOLMES, S. D. and FAIRWEATHER, I. *Hymenolepis diminuta*: the mechanism of egg hatching, 237
HOMINICK, W. M. and CROFT, S. L. Observations on mermithid nematodes from tsetse flies in West Africa, xxxvi
HOMINICK, W. M. *See* AWAN, F. A.
HOOLE, D. and ARME, C. An ultrastructural study of the tissue response of fish to surgically implanted larvae of *Ligula intestinalis*, xxv
HOOLE, D. and ARME, C. *Ligula intestinalis*: cellular response of roach fry (*Rutilus rutilus*) to the plerocercoid larva, lxii
HOUGHTON, G. and BENNETT, C. E. *Costia necatrix* (Henneguy, 1883), a lethal parasite of rainbow trout, *Salmo gairdneri*, xlviii
HOWARD, J. G. *See* DE IBARRA, A. A. L.
HOWELL, M. J. *See* IRVING, D. O.
HULDT, G. *See* LINDER, E.
HURD, H. and ARME, C. *Hymenolepis diminuta*: the pathophysiology of infection in the intermediate host, *Tenebrio molitor*, lxiii
HYDE, J. E. and HALL, F. R. Characterization of the messenger RNA from *Plasmodium falciparum* and construction of a cDNA library, xxxviii

DE IBARRA, A. A. L., HOWARD, J. G. and SNARY, D. Monoclonal antibodies to *Leishmania tropica major*: specificities and antigen location, 523

IBARRA, O. F. and JENKINS, D. C. Studies on the relevance of *in vitro* anthelmintic screening tests employing the free-living stages of trichostrongylid nematodes, lxxiv
INFANTE, R. B. and KLEIN, R. A. Structure-activity relationships (SAR) for the interaction of cholesterol with *Trypanosoma brucei* variant-specific antigen at the air-water interface, liv
IRVING, D. O. and HOWELL, M. J. Characterization of excretory–secretory antigens of *Fasciola hepatica*, 179

JACKSON, F. Observations on the bionomics of the free-living stages of *Trichostrongylus vitrinus* on pasture in S.E. Scotland, xi
JACKSON, HELEN. *Protopolystoma xenopodis*: success of reproduction in single and multiple worm infestations, v
JAP, P. H. K., MEIS, J. F. G. M., VERHAVE, J. P. and MEUWISSEN, J. H. E. TH. Degenerating exo-erythrocytic forms of *Plasmodium berghei* in rat liver: an ultrastructural and cytochemical study, 263
JARRA, W. Passive transfer of immunity in rodent malaria: the effects of hyperimmune serum on *Plasmodium berghei* KSP-11 and *P. chabaudi*, xlix
JEFFS, S. A. and ARME, C. *Hymenolepis diminuta*: uptake of amino acids by the cysticercoid larvae, xxiv
JENKINS, D. C. and CARRINGTON, TRUDI S. Course of primary infections of *Nippostrongylus brasiliensis* in high and low antibody responder Biozzi mice, lxxiii
JENKINS, P., ROSS, G., COX, D. A. and DIXON, J. B. Lymphoid changes in early murine echinococcosis, lxvii
JOHNSTON, B. R. *See* HALTON, D. W.
JOHNSTON, D. A., POYNTON, S. L. and BENNETT, C. E. Observations of *Hexamita salmonis* in rainbow trout, xlviii

KENNEDY, W. P. K., BUTCHER, J. and BARKER, D. C. Development of *Leishmania* species-specific probes by the use of recombinant DNA, xxxiii
KEYMER, A. E. and CROMPTON, D. W. T. Nippostrongylosis in protein-malnourished rats, xli
KHALIL, L. F. The helminth parasites of the spotted lizard fish *Saurida undosquamis* in the Arabian Gulf region, lviii
KLEIN, R. A., ANGUS, JUDITH M. and WATERHOUSE, ANNE E. Carnitine in *Trypanosoma brucei brucei*, xx
VAN KNAPEN, F., PANGGABEAN, S. O. and FRANCHIMONT, J. H. Detection and significance of circulating antigens and immune complexes, liii
KØIE, M. The cercaria of *Aporocotyle simplex* Odhner, 1900 (Sanguinicolidae)–a cercaria developing in a polychaete–and a comparison of the cercaria with that of schistosomes, lxxii
KWONG, YONG WENG and DOBSON, C. Population dynamics of *Angiostrongylus cantonensis* during primary infections in rats, 399

LAI, P. F. *See* SMITH, JUDITH E.
LANCIANI, CARMINE A. Parasite-mediated reductions in the survival and reproduction of the backswimmer *Buenoa scimitra* (Hemiptera: Notonectidae), 593
LANCIANI, C. A. and MAY, P. G. Parasite-mediated reductions in the growth of nymphal backswimmers, 1
LANGSLEY, G. and GOMAN, M. Initial characterization of a genomic library of *Plasmodium falciparum*, xxxvii
LE BLANCQ, S. M., CIBULSKIS, R. E. and PETERS, W. Enzyme polymorphism in Middle Eastern *Leishmania*, xxiii
LEE, T. D. G., GRENCIS, R. K., PRITCHARD, D. I. and WAKELIN, D. A comparative examination of antigen preparations of *Trichinella spiralis* and *Trichuris muris* with reference to their relevance to specific cross-immunity, lxviii
LEE, T. D. G. and WAKELIN, D. Cortisone-induced immunotolerance to *Trichuris muris* in CBA/Ca mice, xxxiv
LEWIS, D. C. and BALL, S. J. The life-cycle of *Eimeria cernae* Levine and Ivens, 1965 in the bank vole, *Clethrionomys glareolus*, 443
LEWIS, DAVID, MACLEAN, J. M. and HOLMES, P. H. Preliminary studies on the pathogenesis of *Trichostrongylus colubriformis* in the Mongolian gerbil (*Meriones unquiculatus*), xlvii

LINDER, E. and HULDT, G. Distribution of exposed and hidden carbohydrates of *Schistosoma mansoni* adult worms demonstrated by selective binding of fluorochrome-conjugated lectins, 503

LINSTEAD, D. and CRANSHAW, MARGARET A. Arginine catabolism in the parasitic flagellate *Trichomonas vaginalis*, xix

LLOYD, S. and SOULSBY, E. J. L. Effect of pregnancy and lactation on infection with *Toxocara canis* in dogs, xxxix

MACASKILL, J. A., HOLMES, P. H., JENNINGS, F. W., URQUHART, G. M., SHARPE, R. and MOWAT, N. Recent observations on the significance of parasite-induced immunosuppression in African trypanosomiasis, vi

MACGREGOR, A. N. Isolation and characteristics of tegumental organelles from *Schistosoma mansoni*, xxviii

MACKENZIE, C. D., PRICE, K. M., CRUICKSHANK, J. K., DENHAM, D. A. and SPRY, C. J. F. Rat host tissue responses to lymphatic dwelling *Brugia pahangi*, i

MACKINNON, BARBARA M. and BURT, M. D. B. The comparative ultrastructure of sperm from *Bothrimonous sturionis* (Pseudophyllidea), *Pseudanthobothrium* sp. (Tetraphyllidea) and *Monoecocestus americanus* (Cyclophyllidea), xxxi

MARTIN, JEAN, CROMPTON, D. W. T. and CARRERA, E. Intestinal pathology associated with an infection of *Ascaris suum* in pigs, xlvi

MASTIN, A. J. and BICKLE, Q. D. *Schistosoma mansoni*: the fate of irradiated, immunizing schistosomula and normal challenge schistosomula in the mouse, l

MATTHEWS, E. *In vivo* observations on eosinophilia in murine schistosomiasis, xiii

MAY, P. G. *See* LANCIANI, C. A.

MAY, R. M. *See* ANDERSON, R. M.

MCBRIDE, J. S., WALLIKER, D. and ROSARIO, V. Antigenic characterization of clones of *Plasmodium falciparum*, xliv

MCCALLUM, H. I. Infection dynamics of *Ichthyopthirius multifiliis*, 475

MCCONNELL, J. M., CORDINGLEY, J. S. and TURNER, M. J. *In vitro* processing of variant-specific glycoproteins (VSGs) of *Trypanosoma brucei*, xxxvii

MCGUIRE, T. C. *See* BARBET, A. F.

MCHUGH, S. M., COULSON, P. S. and WILSON, R. A. Modification of the hepatic portal blood flow in mice harbouring chronic infections of *Schistosoma mansoni*, xi

MCLEAN, S. A., PEARSON, C. D., WALLIKER, D. and PHILLIPS, R. S. Further studies on the recrudescent population of a *Plasmodium chabaudi* infection in mice, xliv

MEEUSEN, E., LLOYD, S. and SOULSBY, E. J. L. Adoptive transfer of immunity against infection with *Babesia microti* in mice, viii

MEIS, J. F. G. M. *See* JAP, P. H. K.

MENDIS, A. H. W., HOWELLS, R. E., REES, H. H. and GOODWIN, T. W. Ecdysteroids in adult *Dirofilaria immitis*, xxiii

MERCER, J. G. Biochemical studies on adult *Schistosoma mansoni in vitro*, lii

MERCER, J. G. *See* ANDERSON, R. M.

MEUWISSEN, J. H. E. TH. *See* JAP, P. H. K.

MILLER, KATHLEEN L. and SMITHERS, S. R. Localized skin changes at the site of immunization with highly irradiated cercariae of *Schistosoma mansoni* are associated with enhanced resistance to a challenge infection, 305

MITRANOND, V. *See* VONGPAYABAL, P.

MONS, B., JANSE, C. J., CROON, J. J. A. B. and VAN DER KAAY, H. J. Results of a simple *in vitro* culture system for *Plasmodium berghei*, lxxvii

DES MOUTIS, I., OUAISSI, A., GRYZYCH, J. M., YARZABAL, L., HAQUE, A. and CAPRON, A. *Onchocerca volvulus*: detection of circulating antigen by monoclonal antibodies in human onchocerciasis, lxxiii

MURRAY, P. K. *See* SCHMATZ, D. M.

MURRILLS, R. J. The hatching mechanism of the eggs of *Notocotylus attenuatus*, lxi

MURRILLS, R. J. The ultrastructure of the miracidium of *Echinoparyphium recurvatum*, viii

NELLAIAPPAN, K. *See* THANGARAJ, T.

NEWTON, ALISON, A. Viruses–exploiters or dependants of the host? 189

NEWTON, B. A. *See* GILBERT, R. J.
NOWELL, F. Some characters of a strain of *Eimeria hungaryensis* passaged into the laboratory mouse (*Mus musculus*), lvii
NOWELL, F. and HIGGS, S. Oocyst morphology and infection patterns of *Eimeria* spp. infecting *Apodemus sylvaticus* in the Reading area, lxxi

OWEN, D. G. and ACKERS, J. Susceptibility of various inbred mouse strains to intra-intestinal infection with *Entamoeba histolytica*, iv

PARKHOUSE, R. M. E., CLARK, N. W. T. and CHAYEN, ANN. Common genetic origin of the surface protein and glycoprotein antigens of *Trichinella spiralis*, ii
PASCOE, E. W. and BEHNKE, J. M. Cellular parameters involved in the generation and expression of immunity to *Nematospiroides dubius* in the mouse, xl
PAX, R. A. *See* BRICKER, CONNIE S.
PAX, R. A. *See* THOMPSON, D. P.
PEARCE, E. J. and MCLAREN, DIANE J. The guinea pig as a novel host for studying immunity to *Schistosoma mansoni*, xii
PERDIOS, S. C., GUTTERIDGE, W. E. and BRAMMER, K. W. A cell-free protein synthesizing system from *Trichomonas vaginalis*, xix
PEREZ-ARBELO, J. *See* HANSEN, B. D.
PHILLIPS, A. and ARME, C. *Hymenolepis diminuta*: uptake of monosaccharides by larvae and young adults, lxii
PHILLIPS, R. A. *See* STOREY, G. W.
PLANT, A. R. and EVANS, N. A. Quantitative aspects of the host–parasite relationship between larval schistosomes and their intermediate hosts, lxx
PONNUDURAI, T., LENSEN, A. H. W., LEEUWENBERG, ANNA D. E. M., VERHAVE, J. P. and MEUWISSEN, J. H. E. TH. Infection of mosquitoes with cultured *Plasmodium falciparum* parasites, xliii
PONNUDURAI, T., LENSEN, A. H. W., LEEUWENBERG, ANNA D. E. M. and MEUWISSEN, J. H. E. Mature gametocytes of *Plasmodium falciparum* produced in two different semi-automated culture systems, lxvi
POYNTON, S. L. and O'ROURKE, N. J. Parasitic infection in brown trout (*Salmo trutta*) and rainbow trout (*Salmo gairdneri*) in the Itchen Valley, Hampshire, xxvi
PRITCHARD, D. I., WILLIAMS, D. J. L. and BEHNKE, J. M. Immunity to the gastrointestinal nematode *Nematospiroides dubius*: the role of the IgG1 hypergammaglobulinaemia, xxxv
PROBERT, A. J., GUNN, A. and SARDA, R. The ultrastructural effects of oxfendazole and praziquantel on *Moniezia expansa in vitro*, xiii
PULSFORD, A. Ultrastructural studies on the dogfish trypanosome, lviii

RAMALINGAM, K. *See* THANGARAJ, T.
RAU, M. E. *See* BRASSARD, P.
RILEY, J. and ALI, J. H. Experimental studies on the life-cycles of pentastomids, xiv
ROBERTS, S. M., VOJVODIC, M. and WILSON, R. A. Further observations on the isolated tegument membrane from *Schistosoma mansoni*, xxviii
ROBINSON, R. D. and HALTON, D. W. Functional morphology of the tegument of *Corrigia vitta* (Trematoda: Dicrocoeliidae), ix
ROLLINSON, D. and GEBERT, F. Some observations on genetic variation of *Schistosoma haematobium* and *Bulinus cernicus* in Mauritius, xxii
ROSE, J. H. and SMALL, A. J. Observations on the development and survival of the free-living stages of *Hyostrongylus rubidus* both in their natural environments out-of-doors and under controlled conditions in the laboratory, 33
ROTHER, U. *See* RUPPEL, A.
RUDIN, W. *See* BASCHONG, W.
RUMPUS, A. E. and SWEETING, R. A. The first recorded occurrence of *Skrjabillanus tincae* (Nematoda) in Great Britain, xxvii
RUPPEL, A., ROTHER, U. and DIESFELD, H. J. *Schistosoma mansoni*: development of primary infections in mice genetically deficient or intact in the fifth component of complement, 315

SCHMATZ, D. M. and MURRAY, P. K. Cultivation of *Trypanosoma cruzi* in irradiated muscle cells: improved synchronization and enhanced trypomastigote production, 115

SCOTT, MARILYN E. Reproductive potential of *Gyrodactylus bullatarudis* (Monogenea) on guppies (*Poecilia reticulata*), xv

SCOTT, MARILYN E. Reproductive potential of *Gyrodactylus bullatarudis* (Monogenea) on guppies (*Poecilia reticulata*), 217

SHUBBER, A. H., LLOYD, S. and SOULSBY, E. J. L. Effect of maternal infection on the immunological response of lambs to infection with *Haemonchus contortus*, xxxiii

SIMPSON, NORMA E. *See* WILSON, P. A. G.

SINGH, M. *See* HO, B.-C.

SITEPU, P. and DOBSON, C. Genetic control of resistance to infection with *Nematospiroides dubius* in mice: selection of high and low immune responder populations of mice, 73

SMALL, A. J. *See* ROSE, J. H.

SMEAL, M. G. and DONALD, A. D. Inhibition of development of *Ostertagia ostertagi*–effect of temperature on the infective larval stage, 27

SMEAL, M. G. and DONALD, A. D. Inhibited development of *Ostertagia ostertagi* in relation to production systems for cattle, 21

SMITH, G. The chemotherapy of fascioliasis (*Fasciola hepatica*)–a study of the effects of different dosing regimes using a mathematical model, xli

SMITH, H. V., QUINN, R., KUSEL, J. R., MUNRO, A. and GIRDWOOD, R. W. A. The presence of human blood group-like substances on the outer surfaces and in the secretions of *in vitro* maintained second stage *Toxocara canis* larvae, and their significance, xxxix

SMITH, JUDITH E., BARKER, ROSALIND J. and LAI, P. F. Culture of microsporidia from invertebrates in vertebrate cells, 427

SMITHERS, S. R. *See* MILLER, KATHLEEN L.

SNARY, D. *See* DE IBARRA, A. A. L.

SOBHON, P. *See* VONGPAYABAL, P.

STEELE, G. M. The distribution and abundance of sheep ticks (*Ixodes ricinus*) on a Welsh moorland, x

STEVEN, GILLIAN E. *See* WILSON, P. A. G.

STOREY, D. M. The host-parasite relationships in normal and protein-malnourished cotton rats infected with *Litomosoides carinii* (Nematoda: Filarioidea), 543

STOREY, G. W. and PHILLIPS, R. A. A technique using continuous action centrifugation for the quantitative recovery of helminth eggs from vegetation and water, 257

SWIDERSKI, Z. Embryogenesis in the Davaineid cestode *Inermicapsifer madagascariensis*, a parasite of man and rodents, lxxix

TANPHAICHITR, N. *See* VONGPAYABAL, P.

TAYLOR, A. E. R., SMITH, V., MILES, M. A., LANHAM, S. M., EDWARDS, Y. H., BAKER, J. R., PENNICK, N. C. and WOO, P. T. K. Polypeptide profiles of trypanosomes: peptideme characterization, xxi

THANGARAJ, T., NELLAIAPPAN, K. and RAMALINGAM, K. Activation of prophenol oxidase in the liver fluke *Fasciola gigantica* Cobbold, 577

THOMAS, J. S. and GREENWOOD, M. *Triaenophorus nodulosus*: ultrastructure of the plerocercoid larva, lx

THOMPSON, D. P., PAX, R. A. and BENNETT, J. L. Microelectrode studies of the tegument and sub-tegumental compartments of male *Schistosoma mansoni*: an analysis of electrophysiological properties, 163

THOMPSON, MARGARET and HALTON, D. W. Excystment *in vitro* of *Cotylurus variegatus* metacercariae, viii

THULIN, J. Running studies on fish parasites in the biotest basin at Forsmark nuclear power station, Sweden, lxx

THULIN, J. The morphology of the miracidium of *Chimaerohemecus trondheimensis* Van der Land, 1967 (Digenea: Sanguinicolidae), ix

TINGLEY, G. A. Environmental sex determination and its implications for an entomophilic nematode, vi

TINSLEY, R. C. The reproductive strategy of a polystomatid monogenean in a desert environment, xv

TITCHENER, R. N. The prevalence of lice on calves in Ayrshire, xi
TOWNSON, S. and BIANCO, A. E. Experimental infection of mice with the microfilariae of *Onchocerca lienalis*, 283
TRETT, M. W., ATKINSON, H. J. and LEE, D. L. A taxonomic study of nematodes using their sense organs as a basis for computer analysis, xlv
TUMBEL, V. E. C. *See* VONGPAYABAL, P.

UPATHAM, E. S. *See* VONGPAYABAL, P.

VALTONEN, E. TELLERVO and HELLE, EERO. Experimental infection of laboratory rats with *Corynosoma semerme* (Acanthocephala), 9
VAN WYK, P. M. Inhibition of the growth and reproduction of the porcellanid crab *Pachycheles rudis* by the bopyrid isopod *Aporobopyrus muguensis*, 459
VERHAVE, J. P. *See* JAP, P. H. K.
VERMEULEN, A. N., MARUGG, J., ROEFFEN, W. F. G. and MEUWISSEN, J. H. E. TH. Factors that influence the harvesting of *Plasmodium berghei* microgametes, liii
VONGPAYABAL, P., SOBHON, P., UPATHAM, E. S., WANICHANON, C., MITRANOND, V., TANPHAICHITR, N. and TUMBEL, V. E. C. Scanning electron microscopic study of the tegumental surface of adult *Schistosoma mekongi*, 325

WAKELIN, D. and DONACHIE, A. M. H-2-linked genes influence the expression of immunity against adult *Trichinella spiralis* in mice, ii
WALKONY, J. F. *See* HANSEN, B. D.
WANICHANON, C. *See* VONGPAYABAL, P.
WANSTALL, S. T., ROBOTHAM, P. W. J. and THOMAS, J. S. Changes in the energy reserves of two species of freshwater fish during infection by *Pomphorhynchus laevis*, xxvii
WARD, P. F. V. *See* COADWELL, W. J.
WHITFIELD, P. J. Can *Transversotrema patialense* induce sex reversal in the pathogenetic snail *Melanoides tuberculata*?, v
WILLIAMS, D. J. L., PASCOE, E. W. and BEHNKE, J. M. Investigation of immunological factors in chronic primary infections with *Nematospiroides dubius*, xxxv
WILLIAMSON, J., FARRELL, N. and MCLAREN, DIANE J. Transition metal complexes as antiparasitic agents, xiv
WILLIS, J. M. Studies on the growth of *Taenia multiceps in vitro*, xxx
WILSON, P. A. G., STEVEN, GILLIAN E. and SIMPSON, NORMA E. *Strongyloides ratti* (homogonic): the time-course of early migration in the generalized host deduced from experiments in lactating rats, 533
WILSON, R. A., COULSON, PATRICIA S. and MCHUGH, S. M. The relationship between resistance to re-infection and liver pathology in mice harbouring chronic infections of *Schistosoma mansoni*, xii
WILSON, R. A. *See* ANDERSON, R. M.
WILSON, R. A. *See* CARTER, N. P.
WOO, P. T. K. *See* BOWYER, SUSAN, M.
WORMS, M. J. and MCLAREN, DIANE J. *Litomosoides carinii* (Nematoda: Filarioidea) attachment of cells to larvae *in vivo*, i
WYATT, H. V. Paralysis following malaria or malaria vaccines, xlix

YAP, E.-H. *See* HO, B.-C.

Index of Subjects

Acquired resistance, of rabbits against *Ixodes ricinus*, 583
Activation, of prophenol oxidase in *Fasciola gigantica*, 577
Aedes aegypti, parasite-induced melanization and encapsulation in, 567
Aedes togoi, parasite-induced melanization and encapsulation in, 567
Angiostrongylus cantonensis, population dynamics of, 399
Antigen location, use of monoclonal antibodies for in *Leishmania tropica major*, 523
Antigens, characterization of the excretory–secretory antigens of *Fasciola hepatica*, 179
  differences and similarities of in various *Trypanosoma* spp., 111
Aporobopyrus muguensis, effects of on the growth and reproduction of *Pachycheles rudis*, 459

Babesia microti, interaction of with *Giardia muris* and *Spironucleus muris* in mice, 101
Bopyrid isopod, effect of on the growth and reproduction of its anomuran host, 459
Bucephaloides gracilescens, functional morphology of the metacercarial cyst of, 45
Buenoa scimitra, parasite-mediated reductions in the survival and reproduction of, 593

Carbohydrates, of *Schistosoma mansoni* selectively bind lectins, 503
Cattle, inhibited development of caused by *Ostertagia ostertagi*, 21, 27
Cellular virology, various aspects of, 189
Centrifugation, continuous action for recovery of helminth eggs, 257
Cercariae, effect of copper and zinc on the survival and infectivity of, 295
  local skin changes at the site of immunization with, 305
Chondracanthus yanezi, a copepod parasite of *Psychrolutes*, 451
Climate, effect of on the free-living stages of *Hyostrongylus rubidus*, 33
Coccidia isolates, identification of by enzyme electrophoresis, 437
Coevolution, discussion of mathematical models describing, 411
  of hosts and parasites, 411
Complement, effect of the fifth component of on infection of mice with *Schistosoma mansoni*, 315
Copepod parasites, a description of from deep-sea fishes in the Pacific, 451
Corynosoma semerme, development of in experimentally infected rats, 9
  experimental infection of rats with, 9
Cultured *Schistosoma mansoni*, development of the surface topography of, 333
Cytochemical study, of the degenerating liver forms of *Plasmodium berghei*, 263

Development, inhibition of in cattle caused by *Ostertagia ostertagi*, 21, 27
  of the free-living stages of *Hyostrongylus rubidus*, 33
Dipetalonema viteae, a comparison of surface iodination methods in, 559
Diplostomiasis, parasite-induced susceptibility to predation in, 495
Diplostomum spathaceum, effect of on susceptibility of its host to predation, 495
  infection dynamics of, 489
Dispersion, a study of the dynamics of by Monte Carlo simulation experiments, 373
Distribution, of exposed and hidden lectin-binding glycoconjugates in *Schistosoma mansoni*, 503
Dynamics, of *Gyrodactylus bullatarudis* population growth, 217

Echinoparyphium recurvatum, effect of copper and zinc on the cercariae of, 295
Egg counts, the interpretation of in the faeces of helminth-infected humans, 605
Egg hatching, mechanism of in *Hymenolepis diminuta*, 237
Egg recovery, by continuous action centrifugation, 257
Eimeria cernae, the life-cycle of in the bank vole, 443
Eimeria spp., enzyme electrophoresis of field isolates of, 437
Electrical potentials, anatomical location of in *Schistosoma mansoni*, 149
Electron microscopic autoradiography, use of in evaluation of different surface iodination methods, 559
Encapsulation, parasite induction of in *Aedes aegypti* and *A. togoi*, 567
Enzyme, location of tanning enzyme in the potato cyst-nematode, 61
Enzyme electrophoresis, use of in the identification of *Eimeria* spp., 437

Ethidium bromide, pharmacokinetics and efficacy of against trypanosome infections, 127
Excretory–secretory antigens, characterization of in *Fasciola hepatica*, 179
Experimental infection, of rats with *Corynosoma sermerme*, 9

Faecal egg counts, the interpretation of in helminth-infected humans, 605
  use of for estimating worm burden, 251
Fasciola gigantica, activation of prophenol oxidase in, 577
Fasciola hepatica, characterization of the excretory–secretory antigens of, 179
Fellodistomum fellis, unusual structural organization of the gut of, 53
Free-living stages, of *Hyostrongylus rubidus*, development and survival of, 33
Functional morphology, of the metacercarial cyst of *Bucephaloides gracilescens*, 45

Genetic control, of resistance to infection with *Nematospiroides dubius* in mice, 73
Giardia muris, comparison with *Spironucleus muris* in infected mice, 85
  interaction of with *Babesia microti*, *Plasmodium yoelii* and *P. berghei* in mice, 101
Globodera rostochiensis, observations on the tanning of, 61
Glucose phosphate isomerase, electrophoretic mobility of in isolates of *Eimeria* spp., 437
Growth characteristics, of *Trypanosoma cruzi* in irradiated myoblasts, 115
Growth, parasite-mediated reduction of in nymphal backswimmers, 1
Gut structure, ultrastructural examination of in *Fellodistomum fellis*, 53
Gyrodactylus bullatarudis, reproductive potential of, on guppies, 217

Haemonchus contortus, estimation of worm burdens in sheep infected with, 251
Helminth eggs, recovery of by continuous action centrifugation, 257
Helminths, the interpretation of faecal eggs counts of in man, 605
Homogonic *Strongyloides ratti*, migration of in the generalized host, 533
Host growth, parasite-induced reductions in, 1
Host mortality, effect of on parasite dispersion, 373
Host–parasite relationships, in normal and protein-malnourished cotton rats, 543
Hymenolepis diminuta, mechanism of egg hatching, 237
Hyostrongylus rubidus, development and survival of the free-living stages of, 33
Hypersensitivity, immediate type, in the skin of *Ixodes ricinus*-infested rabbits, 583

Ichthyophthirius multifiliis, infection dynamics of, 475
Immune response, of mice infected with *Giardia muris* and *Spironucleus muris*, 85
Immunological comparison, of *Trypanosoma* spp. from bats, 111
Infection dynamics, of *Ichthyophthirius multifiliis*, 475
  of the cercariae of *Diplostomum spathaceum*, 489
Infection success, influence of snail and miracidial densities on for *Schistosoma mansoni*, 361
Infectivity, factors affecting for the miracidia of *Schistosoma mansoni*, 339
  of *Schistosoma mansoni* in C5-intact and -deficient mice, 315
Intestinal helminths, the interpretation of faecal egg counts of in man, 605
Iodination, an evaulation of different methods for, 559
Irradiated myoblasts, use of in the study of the growth characteristics of *Trypanosoma cruzi*, 115
Ixodes ricinus, acquired resistance of rabbits against, 583

Lectin binding, selectivity of may reflect physiological function in *Schistosoma mansoni*, 503
Leishmania braziliensis panamensis, specificity of purine uptake by, 271
Leishmania tropica major, immunological properties of, 523
  monoclonal antibodies to, 523
Life-cycle description of for *Eimeria cernae* in the bank vole, 443
Litomosoides carinii, host–parasite relationships in normal and protein-malnourished cotton rats infected with, 543

Malnutrition, effect of in cotton rats infected with *Litomosoides carinii*, 543
Mathematical models, discussion of for the study of coevolution of hosts and parasites, 411
  use of to analyse infection dynamics of *Ichthyophthirius multifiliis*, 475
Mehlis' gland, role of in the activation of prophenol oxidase in *Fasciola gigantica*, 577

Melanization, parasite induction of in *Aedes aegypti* and *A. togoi*, 567
Metacercarial cyst, functional morphology of in *Bucephaloides gracilescens*, 45
Metal toxicity, effect of on survival and infectivity of *Echinoparyphium recurvatum* cercariae, 295
Microfilariae, of *Onchocerca lienalis*, experimental infection of mice with, 283
Microsporidia, culture of, from invertebrate to vertebrate cells, 427
  successful invasion by in cell culture, 427
Microsporidian parasites, a tissue-culture technique for, 427
Migration, of *Strongyloides ratti* in the generalized host, 533
Miracidia, survival and infectivity of in *Schistosoma mansoni*, 339
Monoclonal antibodies, to *Leishmania tropica major*, 523
Monte Carlo simulations, use of to study the dynamics of parasite dispersion, 373
Morphology, of the degenerating liver forms of *Plasmodium berghei*, 263
  of the metacercarial cyst of *Bucephaloides gracilescens*, 45
  of the oocyst of *Eimeria cernae*, 443
  of the tegumental surface of *Schistosoma mekongi*, 325
Mortality, of guppy hosts, induced by *Diplostomum spathaceum*, 489

Nematospiroides dubius, genetic control of resistance to infection with in mice, 73
Neobrachiella amphipacifica sp. nov, a copepod parasite of *Psychrolutes*, 451
New species, *Neobrachiella amphipacifica*, a copepod parasite, 451
Nosema algerae, successful culture of in vertebrate cells, 427
Nosema eurytremae, successful culture of in vertebrate cells, 427

Onchocerca lienalis, experimental infection of mice with the microfilariae of, 283
Oncosphere, ultrastructural study of during hatching in *Hymenolepis diminuta*, 237
Ostertagia ostertagi, different effects of on beef and dairy cattle populations, 21
  effect of temperature on the infective larval stage of, 27
  inhibited development of in cattle, 21, 27

Pachycheles rudis, inhibition of the growth and reproduction of by *Aporobopyrus muguensis*, 459
Parasite dispersion, factors which generate different patterns of, 373
Pharmacokinetics, of ethidium bromide against trypanosome infections, 127
Plasmodium berghei, degenerating liver forms of, 263
Plasmodium spp., interaction of with *Giardia muris* and *Spironucleus muris* in mice, 101
Population dynamics, of *Angiostrongylus cantonensis*, 399
Potato cyst-nematode, observations on the tanning of, 61
Predation, parasite-induced susceptibility to in diplostomiasis, 495
Promastigotes, specificity of purine uptake by, 271
Prophenol oxidase, activation of in *Fasciola gigantica*, 577
Protein-malnourishment, effect on in cotton rats infected with *Litomosoides carinii*, 543
Psychrolutes phrictus, a description of two copepod parasites of, 451
Purification, of *Trypanosoma brucei* variable surface glycoproteins, 511
Purines, specificity of uptake of by *Leishmania braziliensis panamensis*, 271

Reproduction, effect of the parasitic water mite on, in *Buenoa scimitra*, 593
Reproductive potential, of *Gyrodactylus bullatarudis*, 217
Resistance, development of in mice after primary infection with *Onchocerca lienalis*, 283
  of mice to infection with *Nematospiroides dubius*, 73
  of rabbits to *Ixodes ricinus*, 583
  to *Schistosoma mansoni* is associated with host skin changes, 305

Schistosoma mansoni, electrophysiological properties of the tegument of, 163
  host skin changes associated with resistance to, 305
  intracellular microelectrode recordings from, 149, 163
  microelectrode studies of the tegument and sub-tegumental compartments of, 149, 163
  relationships between electrical activity in the tegument and muscle system of, 163
  scanning electron microscopic study of the surface topography of, *in vitro*, 333
  selective lectin binding to, 503

the effect of complement on infection of mice with, 315
transmission of from man to snail, 339, 361
Schistosoma mekongi, a scanning electron microscopic study of the tegumental surface of, 325
Skin, local changes in, at the site of immunization with *Schistosoma mansoni*, 305
Spironucleus muris, comparison with *Giardia muris* in infected mice, 85
interaction of with *Babesia microti*, *Plasmodium yoelii* and *P. berghei* in mice, 101
Strongyloides ratti, the time-course of early migration of in the generalized host, 533
Structural organization, unusual ultrastructural observations in *Fellodistomum fellis*, 53
Surface glycoproteins, analysis of degradation of during isolation from *Trypanosoma brucei*, 511
Surface iodination, an evaluation of different methods for, 559
Surface topography, of *Schistosoma mansoni*, *in vitro*, 333
of *Schistosoma mekongi*, 325
Survival, effect of the parasitic water mite on, in *Buenoa scimitra*, 593
factors affecting for the miracidia of *Schistosoma mansoni*, 339
Susceptibility to predation, parasite induced, in diplostomiasis, 495

Tanning, factors affecting in the potato cyst-nematode, 61
Tegument, a scanning electron microscope study of in *Schistosoma mekongi*, 325
microelectrode studies of in *Schistosoma mansoni*, 149, 163
Tomites, infection of fish hosts by, 475
Transmission, factors affecting the success of for *Schistosoma mansoni*, 339, 361
Transmission dynamics, development of a mathematical model to describe, 361
Transmission success, the influence of snail and miracidial densities on for *Schistosoma mansoni*, 361
Trypanosoma brucei, purification of the variable surface glycoproteins of, 511
Trypanosoma cruzi, cultivation of in irradiated muscle cells, 115
Trypanosoma spp., immunological comparison of in bats, 111
Trypanosome infections, treatment of with ethidium bromide, 127

Ultrastructure, of degenerating liver forms of *Plasmodium berghei*, 263
of the gut of *Fellodistomum fellis*, 53

Variable surface glycoproteins, heterogeneity of is due to enzyme degradation, 511
Viruses, exploiters or dependants of the host, 189
the growth-cycle of, 189

Water mite, effect of on growth of the host, 1
effects of on the survival and reproduction of its host, *Buenoa scimitra*, 593
Worm burdens, use of faecal egg counts for estimation of in *Haemonchus contortus*-infected sheep, 251

PARASITOLOGY

(Founded by G. H. F. Nuttall, F.R.S.)

EDITORS

F. E. G. COX *and* P. J. WHITFIELD

EDITORIAL ASSISTANT

M. ELISABETH PAINTER, Ph.D.

ADVISORY BOARD

L. G. GOODWIN, F.R.S. (*Chairman*)

R. ANDERSON	D. I. GIBSON	J. H. ROSE
D. R. ARTHUR	L. P. JOYNER	J. F. RYLEY
J. R. BAKER	C. R. KENNEDY	G. SALT, F.R.S.
J. BARRETT	ANN M. LACKIE	S. R. SMITHERS
ELIZABETH U. CANNING	D. L. LEE*	K. VICKERMAN
L. H. CHAPPELL	R. J. LINCOLN	D. WAKELIN
S. COHEN, F.R.S.	J. LLEWELLYN	P. F. V. WARD
R. R. A. COOMBS, F.R.S.	S. H. P. MADDRELL, F.R.S.	H. H. WILLIAMS
G. A. M. CROSS	BRIDGET M. OGILVIE	R. A. WILSON
D. A. ERASMUS	M. ELAINE ROSE	C. A. WRIGHT

* Representing the British Society for Parasitology

VOLUME 85, 1982

CAMBRIDGE UNIVERSITY PRESS

CAMBRIDGE

LONDON NEW YORK NEW ROCHELLE

MELBOURNE SYDNEY

Published by the Press Syndicate of the University of Cambridge
The Pitt Building, Trumpington Street, Cambridge CB2 1RP
32 East 57th Street, New York, N.Y. 10022

© Cambridge University Press, 1982

Printed in Great Britain at the
University Press, Cambridge

CONTENTS

(*All rights reserved*)

PART 1 AUGUST 1982

PAGE

LANCIANI, C. A. and MAY, P. G. Parasite-mediated reductions in the growth of nymphal backswimmers 1

VALTONEN, E. TELLERVO and HELLE, EERO. Experimental infection of laboratory rats with *Corynosoma semerme* (Acanthocephala) 9

SMEAL, M. G. and DONALD, A. D. Inhibited development of *Ostertagia ostertagi* in relation to production systems for cattle 21

SMEAL, M. G. and DONALD, A. D. Inhibition of development of *Ostertagia ostertagi* – effect of temperature on the infective larval stage 27

ROSE, J. H. and SMALL, A. J. Observations on the development and survival of the free-living stages of *Hyostrongylus rubidus* both in their natural environments out-of-doors and under controlled conditions in the laboratory 33

HALTON, D. W. and JOHNSTON, B. R. Functional morphology of the metacercarial cyst of *Bucephaloides gracilescens* (Trematoda: Bucephalidae). 45

HALTON, D. W. An unusual structural organization to the gut of a digenetic trematode, *Fellodistomum fellis* 53

AWAN, F. A. and HOMINICK, W. M. Observations on tanning of the potato cyst-nematode, *Globodera rostochiensis* 61

SITEPU, P. and DOBSON, C. Genetic control of resistance to infection with *Nematospiroides dubius* in mice: selection of high and low immune responder populations of mice 73

BRETT, SARA J. and COX, F. E. G. Immunological aspects of *Giardia muris* and *Spironucleus muris* infections in inbred and outbred strains of laboratory mice: a comparative study 85

BRETT, SARA J. and COX, F. E. G. Interactions between the intestinal flagellates *Giardia muris* and *Spironucleus muris* and the blood parasites *Babesia microti*, *Plasmodium yoelii* and *Plasmodium berghei* in mice 101

BOWER, SUSAN M. and WOO, P. T. K. Immunological comparison of four *Trypanosoma* spp. (sub-genus *Schizotrypanum*) from bats 111

SCHMATZ, D. M. and MURRAY, P. K. Cultivation of *Trypanosoma cruzi* in irradiated muscle cells: improved synchronization and enhanced trypomastigote production 115

GILBERT, R. J. and NEWTON, B. A. Ethidium bromide: pharmacokinetics and efficacy against trypanosome infections in rabbits and calves . . 127

BRICKER, CONNIE S., PAX, R. A. and BENNETT, J. L. Microelectrode studies of the tegument and sub-tegumental compartments of male *Schistosoma mansoni*: anatomical location of sources of electrical potentials . . . 149

THOMPSON, D. P., PAX, R. A. and BENNETT, J. L. Microelectrode studies of the tegument and sub-tegumental compartments of male *Schistosoma mansoni*: an analysis of electrophysiological properties 163

IRVING, D. O. and HOWELL, M. J. Characterization of excretory–secretory antigens of *Fasciola hepatica* 179

Trends and Perspectives

NEWTON, ALISON A. Viruses–exploiters or dependants of the host? . . . 189

PART 2 OCTOBER 1982

SCOTT, MARILYN E. Reproductive potential of *Gyrodactylus bullatarudis* (Monogenea) on guppies (*Poecilia reticulata*) 217

HOLMES, S. D. and FAIRWEATHER, I. *Hymenolepis diminuta*: the mechanism of egg hatching 237

COADWELL, W. J. and WARD, P. F. V. The use of faecal egg counts for estimating worm burdens in sheep infected with *Haemonchus contortus* 251

STOREY, G. W. and PHILLIPS, R. A. A technique using continuous action centrifugation for the quantitative recovery of helminth eggs from vegetation and water 257

JAP, P. H. K., MEIS, J. F. G. M., VERHAVE, J. P. and MEUWISSEN, J. H. E. TH. Degenerating exo-erythrocytic forms of *Plasmodium berghei* in rat liver: an ultrastructural and cytochemical/study. 263

HANSEN, B. D., PEREZ-ARBELO, J., WALKONY, J. F. and HENDRICKS, L. D. The specificity of purine base and nucleoside uptake in promastigotes of *Leishmania braziliensis panamensis*. 271

TOWNSON, S. and BIANCO, A. E. Experimental infection of mice with the microfilariae of *Onchocerca lienalis* 283

EVANS, N. A. Effect of copper and zinc upon the survival and infectivity of *Echinoparyphium recurvatum* cercariae 295

MILLER, KATHLEEN, L. and SMITHERS, S. R. Localized skin changes at the site of immunization with highly irradiated cercariae of *Schistosoma mansoni* are associated with enhanced resistance to a challenge infection 305

RUPPEL, A., ROTHER, U. and DIESFELD, H. J. *Schistosoma mansoni*: development of primary infections in mice genetically deficient or intact in the fifth component of complement 315

VONGPAYABAL, P., SOBHON, P., UPATHAM, E. S., WANICHANON, C., MITRANOND, V., TANPHAICHITR, N. and TUMBEL, V. E. C. Scanning electron microscopic study of the tegumental surface of adult *Schistosoma mekongi* 325

BASCH, P. F. and BASCH, NATALICIA. *Schistosoma mansoni*: scanning electron microscopy of schistosomula, adults and eggs grown *in vitro* 333

ANDERSON, R. M., MERCER, J. G., WILSON, R. A. and CARTER, N. P. Transmission of *Schistosoma mansoni* from man to snail: experimental studies of miracidial survival and infectivity in relation to larval age, water temperature, host size and host age 339

CARTER, N. P., ANDERSON, R. M. and WILSON, R. A. Transmission of *Schistosoma mansoni* from man to snail: laboratory studies on the influence of snail and miracidial densities on transmission success . . 361

ANDERSON, R. M. and GORDON, D. M. Processes influencing the distribution of parasite numbers within host populations with special emphasis on parasite-induced host mortalities 373

KWONG, YONG WENG and DOBSON, C. Population dynamics of *Angiostrongylus cantonensis* during primary infections in rats 399

Trends and Perspectives

ANDERSON, R. M. and MAY, R. M. Coevolution of hosts and parasites 411

Proceedings of the British Society for Parasitology, 5–7 April 1982 i

PART 3 DECEMBER 1982

SMITH, JUDITH E., BARKER, ROSALIND J. and LAI, P. F. Culture of microsporidia from invertebrates in vertebrate cells 427

CHAPMAN, H. D. The use of enzyme electrophoresis for the identification of the species of *Eimeria* present in field isolates of coccidia . . . 437

LEWIS, D. C. and BALL, S. J. The life-cycle of *Eimeria cernae* Levine and Ivens, 1965 in the bank vole, *Clethrionomys glareolus* 443

HO, JU-SHEY. Copepod parasites of *Psychrolutes* (Pisces: Scorpaeniformes) from deep water in the eastern Pacific 451

VAN WYK, P. M. Inhibition of the growth and reproduction of the porcellanid crab *Pachycheles rudis* by the bopyrid isopod, *Aporobopyrus muguensis* 459

MCCALLUM, H. I. Infection dynamics of *Ichthyophthirius multifiliis* . . 475

BRASSARD, P., RAU, M. E. and CURTIS, M. A. Infection dynamics of *Diplostomum spathaceum* cercariae and parasite-induced mortality of fish hosts 489

BRASSARD, P., RAU, M. E. and CURTIS, M. A. Parasite-induced susceptibility to predation in diplostomiasis. 495

LINDER, E. and HULDT, G. Distribution of exposed and hidden carbohydrates of *Schistosoma mansoni* adult worms demonstrated by selective binding of fluorochrome-conjugated lectins 503

BARBET, A. F. and MCGUIRE, T. C. Purification of *Trypanosoma brucei* variable surface glycoproteins: analysis of degradation occurring during isolation 511

DE IBARRA, A. A. L., HOWARD, J. G. and SNARY, D. Monoclonal antibodies to *Leishmania tropica major*: specificities and antigen location . . 523

WILSON, P. A. G., STEVEN, GILLIAN E. and SIMPSON, NORMA E. *Strongyloides ratti* (homogonic): the time-course of early migration in the generalized hosts deduced from experiments in lactating rats 533

STOREY, D. M. The host–parasite relationships in normal and protein-malnourished cotton rats infected with *Litomosoides carinii* (Nematoda: Filarioidea) 543

BASCHONG, W. and RUDIN, W. Comparison of surface iodination methods by electron microscopic autoradiography applied *in vitro* to different life-stages of *Dipetalonema vitae* (Filarioidea) 559

HO, B.-C., YAP, E.-H. and SINGH, M. Melanization and encapsulation in *Aedes aegypti* and *Aedes togoi* in response to parasitization by a filarioid nematode (*Breinlia booliati*) 567

THANGARAJ, T., NELLAIAPPAN, K. and RAMALINGAM, K. Activation of prophenol oxidase in the liver fluke *Fasciola gigantica* Cobbold . . 577

BROSSARD, M. and FIVAZ, V. *Ixodes ricinus* L.: mast cells, basophils and eosinophils in the sequence of cellular events in the skin of infested or re-infested rabbits 583

LANCIANI, CARMINE A. Parasite-mediated reductions in the survival and reproduction of the backswimmer *Buenoa scimitra* (Hemiptera: Notonectidae) 593

Trends and Perspectives

HALL, ANDREW. Intestinal helminths of man: the interpretation of egg counts 605